

DETAILED ACTION

Election/Restrictions

1. Claim(s) is/are generic to the following disclosed patentably distinct species:

Species 1: claims 1, 6-11 and 33 corresponding to Figure 1 as directing to generating probability signal using n-th random number.

Claims 1, 6, 11 and 33 are generic.

Species 1a: claim 7 corresponding to Figure 11 as directing to generate random number data using x random number.

Species 1b: claim 8 corresponding to Figure 13 as directing to generate random number data using x and y random numbers for rotating x based on y.

Species 1c: claim 9 corresponding to Figure 15 as directing to generate random number data using x and y random numbers for scrambling.

Species 1d: claim 10 corresponding to Figure 17 as directing to generate random number data using two different set of random numbers for rotating and scrambling.

Species 2: claim 2 corresponding to Figure 3 as directing to generating probability signal using n and k data for rotating n based on k.

Species 3: claim 3 corresponding to Figure 5 as directing to generating probability signal using n and j data for scrambling.

Species 4: claim 4 corresponding to Figure 7 as directing to generating probability signal using two different set of random numbers for rotating and scrambling.

Species 5: claim 5 corresponding to Figure 9 as directing to generating probability signal using selective upper and lower probability values.

Species 6: claims 12-32 corresponding to Figures 19, 21 and 23 as directing to dynamic range data with probability upper and lower values.

Claims 30-32 are generic.

Species 6a: claims 15-20 corresponding to Figures 25 and 27 as the probability lower or upper values are set by the random number.

Species 6b: claims 21-23 corresponding to Figure 33 as the probability lower or upper values are set by n and k data with rotating n based on k.

Species 6c: claims 24-26 corresponding to Figure 37 as the probability lower or upper values are set by n and j data with scrambling n and j.

Species 6d: claims 27-29 corresponding to Figure 41 as the probability lower or upper values are set by two different set of random numbers for rotating and scrambling.

Species 7: claims 34-45 corresponding to Figures 54-57 as directing to dynamic range data with probability upper and lower values adjusted by the probability adjusted increase factor.

Claims 34-37 are generic.

Species 7a-7f: claims [{38}, {39}, {40}, {41}, {42}, {43-45}] wherein each set of claims calculate the probability increase factor differently as selecting from plurality, increase linearly, increase step by step, increase based on number of losses and linear increasing after, increase based on number of losses and remains, or increase step by step after number of losses, respectively.

Species 8: claims 46-48 and 52-75 corresponding to Figures 64 and 66-68 as directing to dynamic range data with probability upper and lower values adjusted by the fluctuation width.

Claims 46-48 and 52-54 are generic.

Species 8a-8e: claims [{55}, {56}, {57}, {58}, {59}] wherein each set of claims calculates the fluctuation waveform differently as factor time axis, moving phase change, selecting from plurality, inverting or non-inverting, or conditions on the fluctuation cycle, respectively.

Species 8f-8p: claims [{60}, {61}, {62}, {63}, {64}, {65}, {66}, {67}, {68}, {69}, {70}] wherein each set of claims directing to different shape of the fluctuation waveform as sine/cosine, square, triangular, saw-tooth, trapezoidal, distribution, parabolic, cubic root, attenuating vibration, synthesis fluctuation, or stored fluctuation, respectively.

Species 8q-8u: claims [{71}, {72}, {73}, {74}, {75}] wherein each set of claims directing to different way of obtaining random number as adding offset, rotate basis data, scramble data, rotate and scramble data, or trigger timing, respectively.

Species 9: claims 49-51 corresponding to Figure 72 as directing to dynamic range data with probability upper and lower values adjusted by the fluctuation rate.

The species are independent or distinct because each of the species is directing to different way of obtaining the probability signal, random numbers, adjusting factors, and fluctuation width/rate for computing the probability dynamic range. In addition, these species are not obvious variants of each other based on the current record.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, or a single grouping of patentably indistinct species, for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

There is a search and/or examination burden for the patentably distinct species as set forth above because at least the following reason(s) apply:

Each of the species must require separated and distinct consideration as they are embodying so many way of computing certain values/parameters for generating random numbers and/or probability signals. Further, extensive multiple searches are needed to cover all the species.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or a grouping of patentably indistinct species to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected species or grouping of patentably indistinct species,

including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

The election may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the election of species requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected species or grouping of patentably indistinct species.

Should applicant traverse on the ground that the species, or groupings of patentably indistinct species from which election is required, are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing them to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the species unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other species.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141.

2. A telephone call was made to Mr. Paul D. Bianco, Reg. No. 43,500 on 10/11/2010 to request an oral election to the above restriction requirement, but did not result in an election being made.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chat C. Do whose telephone number is (571)272-3721. The examiner can normally be reached on Tue-Fri 7:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis Bullock can be reached on (571) 272-3759. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chat C. Do/
Primary Examiner, Art Unit 2193

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